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ABSTRACT

The proliferation of non-book materials currently being produced for use at the junior college and college level offers the learning resources center the unique opportunity to serve the special needs of each student and to supply the student with materials and facilities for optimum learning. The library can become comprehensible to the user if librarians focus on the interrelatedness of books, films, recordings, and the like. Entries for all media can be interfiled into a single catalog thus contributing enormously to helping the user discover the materials that will meet his particular need. Guidelines that will aid the librarian in the promotion of media utilization include: (1) the objectives for a given project; (2) the audience's size, location, knowledge, time, and sophistication; (3) the presenter's sophistication and experience; (4) the production budget; (5) the potential amortization; (6) the post-production costs, logistics, and staffing; (7) the flexibility of the chosen media; (8) the set-up time; (9) the content and story line and (10) the aspect of continuing education. (MF)

Richard Duette

PROMOTING MEDIA UTILIZATION

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I. INTRODUCTION

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Junior and community colleges constitute one of the more dynamic sectors in American higher education, both because of the increasing number of students in attendance and because of the number of new institutions established annually. The development of adequate learning resources and services has been difficult to formulate for such institutions because of such factors as the widely diversified purposes and sizes of the institutions, private and public, the high proportion of commuting students, the comprehensiveness of the curricula, the willingness of administrators to experiment unhampered by tradition, and the heterogeneity of ability, age and the background among those enrolled.

II. THE INTERRELATEDNESS OF MEDIA

The proliferation of non-book materials currently being produced for use at the junior college and college level offers the Learning Resources Center the unique opportunity to serve the special needs of each student and to supply the student with materials and facilities for optimum learning. Although knowledge of how learning takes place is limited, we do know that the cognitive style and learning patterns by which each student learns most effectively, varies with the individual. The library that recognizes these differences will try to provide each student with a choice of learning devices, so that he may select those best suited to his own abilities and limitations in approaching a specific problem.

To do this successfully, however, we must explore some of the new approaches to the two-fold dilemma of reference service. How to help the user become aware of all of the available materials relating to his particular subject, and how to organize these materials consistently and logically, so that they may be retrieved quickly and easily.

The traditional methods of handling non-book materials in a library require a patron to consult a confusing array of printed lists, card catalogs, drawers cupboards and shelves. Often these are located in widely separated areas, and he must run from room to room, and have the instinct of a Sherlock Holmes in order to determine the

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University, Boone, North Carolina.*

availability of materials which he needs or desires. Small wonder that the search is abandoned by all but the most determined long before the full resources of the library or the college have been uncovered. While the newer forms of media are being used with increased frequency by the instructor in the classroom, the average student remains unaware of their potential value to him in independent study as he seeks increased understanding of a subject, or pursues a topic of personal interest. If these materials continue to remain tucked away in sundry places, to be discovered only if the student is bold enough to ask the reference librarian for help, and articulate enough to verbalize his needs, then their future potential may never be realized and we have cheated the student.

Separate treatment of each medium, separate cataloging, separate listings, separate shelving - all serve to obstruct the users access to the materials that are available to him in the LRC. But the library can become comprehensible to the user if we librarians stop thinking of books, films, recording, and the like, as widely disparate entities and focus on their interrelatedness.

They are all learning devices. Once this is established, we can take the second step toward making the library comprehensible to the user. Entries for all media can be interfiled into a single catalog, whether it be a conventional card catalog, in book form or on magnetic tape. The integrated catalog, in whatever form, can contribute enormously to helping the individual discover the materials that will meet his particular need. Consider, for example, the student who comes into the library in search of Yeats' poetry. Searching the catalog under the author's name, he will find not only the book, but also recordings of Yeats' poetry, and perhaps a beautifully produced color film called "Yeats Country." Suddenly, a dreary assignment may turn into an awakening of new interest, a discovery which the same student might resist in the classroom, but which now becomes exciting to him on his own.

(USE TRANSPARENCY SHOWING TOTAL IRC COLLECTION)

With the interfiling of all entries in an integrated catalog, we have given the user a complete listing of everything in the collection in one accessible source; books, recordings, films, transparencies, filmloops, tapes, etc. Do we then turn around and obstruct his retrieval of the material by shelving each medium in a separate room or separate section of the library? The logical sequence to the consistent cataloging and classification of all media, and the interfiling of the catalog, must certainly be the intershelving of the media itself. Intershelving offers the third opportunity to expand the users awareness of the variety of materials available to him and to make these materials more readily retrievable. Yet, we've all been told that this is the impossible dream; impractical, unworkable. Is it? We began at the College of DuPage with the concept of the integrated catalog, but in our second year of operation, realized that this was not enough. If the student didn't see the material on the shelf, he didn't ask for it.

Students tend to regard audiovisual materials as instructional devices to be used by the faculty in classroom presentations. There seemed only one way to change this concept and we decided to experiment with it. Beginning on a small scale, we intershelved science filmloops with science books, set up equipment on nearby tables and stood back to see what would happen. Students were intrigued with the idea that they could view the filmloops on their own in the library and our staff was kept busy demonstrating the use of the equipment until enough students had used it that they could begin helping themselves and each other. The response was so enthusiastic, that we began intershelving filmloops into the history and social science section. Soon our filmloop cabinet was emptied and our filmloops being used. We couldn't continue our experiment much beyond this point because of the limitations of space in our temporary locations, but it was sufficient to convince our staff that it is not only possible, but eminently workable and desirable.

So I think I am saying to you that we must get away from the question which librarians and audiovisual specialists have too frequently asked themselves, "which is best, the film or the book?" and gravitate to a more modern concept of "which is better,

the film or the book to do the task and hand."

(USE TRANSPARENCY ON "AN APPROACH TO MEDIA")

III. TEACHING VS. LEARNING

If we explore the concept of teaching versus learning, we will find that we have a considerable amount of conflict of interest. Have we, in education in the past, been organizing for ourselves or have we been organizing for the students who are our reason for being - to help provide them a better learning experience.

I would like to quote for you from a book entitled "Innovation in Education" published by the Committee on Economic Development - a very exciting book, and I recommend it to you highly. In the section dealing with merging instructional patterns, this report from CED says this, and I quote: "The traditional practice of placing approximately 30 or 40 students in a box-like classroom and staffing this unit with one teacher, is under serious challenge in the modern school. Systems theorists have been examining this simple organizational pattern with increasing skepticism. There is now emerging a more efficient system with a comprehensive, flexible staffing pattern, and with instructional system packages that permit greater personal contact between the teacher and the individual learner. While we do not suggest that there is an ultimate or final organization plan, there is a clearly discernible pattern common to many of the latest innovative developments across the nation. In the new view, teaching and learning activities in schools can be classified under three categories. One, lecturing, explaining and demonstrating. Two, independent study and inquiry under supervision. And three, discussion involving the teacher with small groups of students. An analysis of these categories can meet to a more sophisticated organizational plan for instruction than now generally obtains. There is an increasing realization that too much teaching in traditional schools is devoted to the functions in the first category. This is mainly talking on the part of the teacher, and listening on the part of the student. Lecturing, as carried on in the traditional manner is not usually an efficient use of the time of students and teachers. The lecturing, explaining and demonstrating function of teaching can

be produced in a studio and placed on films or video tape.

These can be available for selective use by the teacher on the basis of diagnosis of individual needs that become evident from the dialog taking place between the teacher and small groups of three to eight students. The teacher can simply prescribe the lecture and delegate to an assistant the routine manner of showing the film or video tape before a small tutorial group of students.

So if we are really concerned about promoting media utilization in a meaningful manner for an effective student learning situation, then we are talking about more than just providing a library or audiovisual service or creating a learning resources center - we are talking about a very basic matter, and that is change. Change is very difficult to come by in education. We have been doing so many things for so long the same old way, that it is difficult to shake any of us. But I think experimental programs that are going to be meaningful for a better student learning environment are essential if libraries and media are going to play the role that they should play in individualized instruction.

I am not here today to preach the wares of College of DuPage, but I do think that we are trying some things that would be of interest to you that are quite germane to the manner in which we are coming to grips with the promotion of media utilization.

(TRANSPARENCIES FOR THE DEVELOPMENTAL LEARNING LABORATORY)
(TRANSPARENCIES FOR ALPHA I)

Role of Educational Advisor. The educational advisor will be charged with the development and implementation of the most effective learning situation for his individual students.

He will spend a great deal of his time meeting with students individually and in small groups, and must be willing to accept and encourage a large measure of student independence of thought and action. His responsibilities include the selection and orientation of Alpha One Students, individual and group advising activities, and participation in group seminars, problem-oriented discussion groups, and project evaluation.

Types of Educational Experiences. Recognizing that no one approach to education is the answer for all individuals, Alpha One will provide for a variety of educational

experiences which allow for greater individualization than is currently possible. Alpha One will provide for the individualization of learning goals, learning materials and equipment, learning environments, instructional methods and techniques, rates of advancement, and evaluative procedures and criteria for evaluation. The types of educational experiences can be broken down into five general areas. These include:

- I. Educational advising, tutorial and small group experiences.
- II. Free study experiences.
- III. Problem centered study.
- IV. Prescribed study.
- V. Standard college activities.

1. Educational Advising, Tutorial and Small-Group Experiences. The key to Alpha One will be the educational advising situation. Here students, in cooperation with their educational advisor, are provided the opportunity to plan their total educational experience. They determine their individual learning objectives, learning strategies, and evaluative procedures in a climate of trust and concern for the whole student. Participation in tutorial activities and small-group experiences will heighten student involvement in Alpha One, challenge their attitudes and values, build commitments, and provide them with greater self-knowledge.

II. Free Study. In this area, the term free study pertains to the independence with which the students seeks out his area of personal interest; it pertains to the ability and willingness with which he seizes a learning opportunity and gives reign to his curiosity; and it implies that he plan a large part of his own educational development. The free study area will consist of seminars and individual or group projects.

A. Seminars. Students and/or educational advisors may initiate seminars on topics of their interest by obtaining a minimum number of student participants. A common method of seminar development would be the bulletin board approach where students would place on the bulletin board a form listing the proposed

seminar, together with its description and rationale. Space would be provided in which interested individuals could sign up for participation. Examples of content areas might include:

1. The effects of the computer on contemporary society.
2. The sociological and psychological effects of rock music on the contemporary individual.
3. Marx, Wagner and Darwin.
4. The effects of the Civil War still present in today's society.
5. The role of the female in contemporary society.

There would be four basic kinds of seminar strategies:

1. Leader-directed exploratory activities.
2. Group-directed exploratory activities.
3. Leader-directed non-exploratory activities.
4. Group-directed non-exploratory activities.

Evaluation of the seminar would be done by the group, methods and purposes of the evaluation being determined by the seminar participants.

B. Group and Individual Projects. Individuals and/or groups of individuals may, in consultation with their educational advisor, engage in project activities as part of their educational experience. Examples of such projects may be as follows:

1. The development of a career choice survey.
2. The writing of a novel or short story.
3. Creating a work of art.
4. Writing a program for the computer.
5. A field experience in urban living.

Instructional strategies will be highly individualized with an infinite number of learning approaches available to project participants. Evaluation will be by the group and/or individual in conjunction with educational advisors.

III. Problem-Centered Study. The problem centered study will place emphasis on a continuing series of weekly presentations serving to identify and explore contemporary societal issues. Small-group interactive experience following each presentation will provide the medium for students to react, examine values, test new ideas, and develop a commitment to humanistic action. Provisions will also be made for a written expression of ideas, providing students with opportunities for imaginative expressions as well as concise and reasoned exposition. The problem-centered area will provide common educational experience for students regardless of their field of specialization, and emphasis will be placed on the unity of rather than the compartmentalization of knowledge. Topics for presentation will range across problems and progress in man's eternal quest for personal happiness and survival. They might include issues relating to racial strife, space travel, foreign policy, sexual freedom, pollution, organ transplants, urban congestion, sensitivity training, educational institutions, drugs, Viet Nam, archeological discoveries, etc.

Examples of instructional strategies will include:

1. Large-group presentations by staff members, programs by visiting lecturers, films, demonstrations and other audiovisual techniques.
2. Small-group discussions led by educational advisors and stimulated by the large group presenters. Students will take an active role in analyzing, examining and discussing the basic presentations.
3. Independent study which will include outside readings, field experiences, papers and examinations.

Evaluative techniques will include papers, examinations and coordinated student-advisor evaluations.

IV. Prescribed Study. Prescribed study will be structured in a way that will allow students to achieve a set of predetermined objectives.

In the prescribed study area, students will be provided with a list of stated behavioral objectives in which the kinds of behavior to be accepted as evidence that they have achieved their objective is clearly stated. The objectives will also include

the conditions to be imposed upon the learner when he is demonstrating his mastery of the objective and what the acceptable performance level will be. Students well informed of the requirements for success can then assume a high degree of responsibility for their own learning and can better measure their progress toward criterion achievement. The student equipped with a manual of the stated criteria for the course or lesson at hand could proceed to the appropriate learning center and engage in designated learning activities which could be of any feasible form. The student manages his own participation or practice and can repeat each event as he sees fit at his own individual pace. He can judge for himself when he has acquired the desired competencies as outlined in the statement of objectives, and when he is ready for evaluation, always having access to his educational advisor for consultation and assistance. Examples of content areas might include:

1. Mathematics 100 - Intermediate Algebra (5 credit hours)
2. Psychology 100 - General Psychology (5 credit hours)
3. Electronics Technology 151 - Basic Electronics (5 credit hours)
4. Political Science 201 - Introduction to Government (5 credit hours)
5. Physics 151 - General Physics (5 credit hours)

Instructional strategies will involve a multiplicity of methods including programmed learnings, bibliographical research, computer assisted instruction, reading, listening, viewing films or television, and performing experiments, participation in free study or problem centered activities, and participation in standard classroom activities.

Evaluation will be based on examinations developed from the stated objectives.

The detailed list of objectives set forth in the educational specifications for each course constitute the criteria for that course. Students will be measured on their ability to attain all criterion competencies.

So, through the Developmental Learning Laboratory and our Alpha I project, we feel that some exciting things are going to happen. To recapitulate a little, let me say this. I believe that I have said to you that learning will take place whether teaching is there or not and that perhaps in the future, and perhaps in the future, and perhaps the future for learning resources is a question of getting to the

point where we will literally not be able to tell where the teaching begins and where the learning ends.

Long before we became concerned about individualized instruction, long before the learning resources concept took root, long before the technology was introduced to us, a wise educational philosopher made this comment, "Education is the process of allowing the student to invent himself," and I think it is through such experimental programs in teaching and learning, that we allow the student to invent himself.

Every human being has a different and evolving pattern of needs. In the nature of things we vary greatly in our innate abilities, our temperaments, our experiences, our accomplishments, and our visions of personal fulfillment. Modern American culture literally promotes individualism. Our natural individuality is stimulated by the changing social structure and by the rapid evolution of values and techniques. Increasingly, the individual must choose his own life modes without benefit of tradition. He feels impelled to assume a personal identity and may find himself in crisis.

Inevitably, such a complex cultural situation incorporates ambiguities and contradictions. From a diversity of fads and ideologies of images and models the individual may adopt conflicting modes, and he may be diverted into modes which are destructive both to himself and to society. Constructive individualism, and the learning that accompanies it, requires frequent self assessment, appropriate revision of roles and goals, and continued achievement. To lead an effective and rewarding life, one must gain and maintain an honest view of himself; of his strength and weaknesses, of his qualities, his abilities, his opportunities, his accomplishments. To this goal we must all dedicate ourselves. Librarians, audiovisual specialists, teachers and administrators. If this goal is to become a reality, then the shift in focus in the teaching-learning process from the instructor in the classroom to the student doing more and more independent study further implies that the instructor must become a resource person, perhaps the greatest of all instructional resources that we have - a person very knowledgeable in the instructional materials available in the LRC - a

person who can provide the student with a list of materials, sources other than textbooks, and diverse formats from which information can be obtained. In other words, the instructor will assume some of the traditional functions of the librarian. And in essence the librarian as well as the audiovisual specialist will take over more and more of the functions of the instructor. And all three, the librarian, the instructor and the media specialist will have to work closer together and spend more time in the learning resources center, while learning is taking place. This merger, not only in terms of function and responsibilities will assume physical characteristics as they work together in the library learning resources center.

Let me reiterate one thing - that learning will take place whether teaching takes place or not. I would like to share with you a little poem which appeared in a journal recently. It was written by Judy Endicott of Eisenhower High School in Lawton, Oklahoma. I think it is pertinent to what we have just been discussing.

WHAT WOULD YOU LEARN WITHOUT SCHOOL?

I learn things in school;
Well, I memorize things, anyway;
Unimportant things, at that.
And what I wouldn't do with a day
If I weren't in school:

I'd find the world,
Go for walks, talk with friends,
Gaze at stars, learn the meaning of God,
A meaning that can't be taught.
I'd build things and paint things and
create things
I'd read a lot and write a bit,
And, sometimes, just sit,
And think about myself, for hours on end;
I don't really know me;
Surely it's important to know oneself.
Someday, when I have time
Away from school and homework and family
summer vacations,
I'll meet me,
And have fun just knowing myself.

What I couldn't do with a day
Completely away
From school.

IV. INNOVATION VERSUS SUFFOCATION

hear a great deal today in education about innovation - a term that has grown to

a magnitude which frightens me. Because innovation means something different to every one of us. I may consider innovation to be the fantastic audio-video dial-access retrieval system at Oak Park, River Forest High School in Illinois. And yet, the average teacher in the classroom may think that she has reached the height of innovation when she turns the switch on an overhead projector for the first time.

DeTocqueville, in his "Democracy in America" written in 1835, had this to say about American education at this time, and I quote: "They, the Americans, have a lively faith in the perfectibility of man. They judge that the diffusion of knowledge must necessarily be advantageous and the consequences of ignorance fatal. They all consider society as a body and a state of improvement. Humanity is a changing scene in which nothing is, or ought to be, permanent, and they admit that what appears to them today to be good may be superseded by something better tomorrow." The long delayed advance of technology in education has entered a stage of acceleration. Increasing use of newer media in the classroom calls for many changes - new designs for buildings, changes in the organization and scheduling of classes. Sometimes, rather drastic changes in instructional procedures that seem to strike at the very heart of the teacher-pupil relationship. Just how will these changes affect education? Will they tend to dehumanize the instructional process? Will it place too much emphasis upon economy and efficiency, too little upon quality? Will administrators and instructors alike be able to come to realistic grips with the fact that they cannot place dial access, computer aided instruction information retrieval systems or any other mechanized or automated processes down in the same organizational framework or administrative pattern that we have had for decades, and expect them to work or be effective.

Ironically, man learns to dread his own technological creations while at the same time relying upon them for his protection or his very salvation. We have the habit of saying that educators fear the machine. I would venture that teachers do not fear the machine. They simply do not have the time to program materials to effectively use it under our old organizational patterns. Technology's threat to

education is not denying it or fearing it, but facing its dangers and problems with the time to adequately program for it. Oddly enough, the problem is not that the machine will mechanize education, but that it will allow us to humanize education. When Mumford talks about humanizing the machine, he is really talking about humanizing people.

I believe in innovation in education if it is meaningful and purposeful. I do not believe in innovation in education if we are doing it in order to educationally "keep up with the Joneses," to use it as an academic status symbol to wrap around ourselves saying that we are advancing, we are progressing, we are doing something new and different. I believe in the new and the different when it enables us to do a better job and when students learn. I do not believe in innovation when we are using it to hide behind. I think that innovation is inevitable. Again I quote from Innovation in Education, the report of the Committee of Economic Development. "Innovation in education, whether it involves the use of new curriculum materials or new educational technology, has become essential if the schools are to be genuinely effective in achieving their aims and goals. Continuing assessment of the product of the schools also is necessary. This means the development of principles and techniques for critically judging the work of whatever the schools teach, and the effectiveness and efficiency of their methods of instruction."

I, for one, hope that innovation in education continues on a multi-level plain. I am excited by the instructor who does turn that switch on the overhead projector for the first time, or who does introduce a 16mm film into her classroom for the first time. I am equally excited about the great prospects for the future. At the first Annual Conference on the Junior College Library held in Los Angeles three or four years ago, and jointly sponsored by the American Library Association and the American Association of Junior Colleges, we heard an address by Mr. W. C. Bennett of Precision Instrument Company.

Mr. Bennett presented the Unicon Archival Mass Memory System which is a unique

tape called Unidensity. The process is very similar to the reading of data on punch paper tape where a hole is punched in the paper to create a bit of information and this bit is detected and read by shining light through the hole on to a photocell. However, the Unicon System utilized a polyester tape that has been coated with an opaque layer of a special material. The light of an Argonne Lazor is focused on the tape burning an infinitesimal hole on the surface of the tape. This Unicon System provides the fantastic compaction ratio of 47,500 to 1. That is, data contained on 47,500 average reels of magnetic tape could be written by the Lazor on one reel of Unicon tape of equal length. Whereas, Mr. Bennett pointed out that present technology can now produce such compaction of information, he was sorry to state that the precision mechanism required would price the system completely out of existence. In essence, he was telling us that it was possible for almost any library in the country to possess the entire Library of Congress holding on a few reels of tape, but that the only problem was that this package would cost the average library several billion dollars.

And so, the educational prospects for developing innovational techniques and systems are enormous. And even at this point in time, we labor under the staggering challenges that innovation will create. We have the information that must be programmed into the machine that will in turn transmit it to the user who needs the material.

We must accomplish two things as we face the innovative, precarious future in education. Number one, whatever we do must be comprehensible. We ourselves must understand what we are doing. Whatever we do must reflect the unity of the function of the system and it must reflect our organizational pattern, and by the same token, the organizational pattern reflect the innovation. Number two, our system must be humanistic. Webster defines humanism as a "system in which man, his interests and development, are made central and dominant." I once heard a Junior College president say that Plato and Aristotle were probably the first educators with the Junior College concept. That our system be humanistic, that whatever approach to innovation we have

humanistic. What does humanism have to do with the computer or dial access or

all of the other innovational opportunities that we will have in the future? I think that if we are successful in the future our system will reflect our concern for the individual more than it has in the past. His needs, desires, interests, hopes, ambitions, habits, and all of these in relation to his fellow man. The junior college philosophy is characterized by its concern for the individual, but we can never lose sight of the fact that he does not exist in a vacuum. We cannot expect on the day classes begin to plug him into the computer, and two years later unplug him, give him AA degree, fully equipped and prepared to go out into society ready to face reality. And the great challenge to us in the future as we develop sophisticated innovational systems, will be if we can establish comprehensible and humanistic approaches to man and the machine. And this we will be forced to do as we meet resistance all along the way.

I have titled this section of my paper "Innovation vs. Soffocation" and we have talked a lot about innovation. But what if we don't change? What if we find, as professionals we can't change? What will happen to us if we do not do a better job in the future?

(QUOTATION FROM A. M. COHEN'S BOOK, DATELINE '79)

(Quote from Cohen's book)

Competition, a fascinating potential spur to action, is on the horizon. Will it be the trigger? Suppose, for instance, a group appeared at a junior college governing board meeting and made the following proposition:

We represent the XYZ Learning Corporation. Our instructional specialists have developed and tested certain materials over the past few years. We have tried these procedures on a variety of populations and feel we can GUARANTEE learning along certain dimensions.

Here is a list of specific objectives in the areas of mathematics and communications (we have objectives and programs in other fields as well). We will set up our organization anywhere in your district and take any 1,000 normally functioning young people you send to us. For each student who learns to solve THESE types of problems as measured by THESE TESTS and to write THESE types of papers in

accordance with THESE models, you will pay us \$100. If we cannot produce these results within three months with at least 80 per cent of the group, you owe us nothing. No untoward effects will accrue to the learners - you may administer to them any attitudinal tests of your devising.

Suppose, after further elaboration and inquiry, a member of the board turned to the college president and asked, "Your budget last year approximated \$2,000,000. Just what did we get for our money?" And, assuming a tenacity not often displayed by board members when speaking of educational matters, suppose he pressed further and said:

Unless you bring us evidence within six months of the nature and extent of the learning achieved by at least a significant proportion of your students, we will seek legislative authorization to use tax funds to be paid to private corporations in accordance with learning contracts. We will set up a public commission to monitor those contracts and, incidentally, we will reduce your budget by an equivalent amount each time we enter into an agreement with a group that guarantees learning.

Don't bring in grade point averages or vague goals capable of an infinity of interpretations! We want concrete evidence that our students are LEARNING - demonstrably and predictably.

And if the board were persistent and the president strong at heart, the college might very quickly set itself on a track leading toward the learning institution so badly needed, but so rarely found, in American education. Shall we move NOW - before the mainstream of instruction in this country runs completely out from under what we quaintly call our "educational" institutions?

This alternative is less awesome than perhaps having the students burning the College down or the community citizens barracading the College so that our fortress of the future becomes a reality.

V. A TIME TO CHANGE - CURRICULUM AND MEDIA

I would like to offer to you a rather warped vision of the development of curriculum

in the community college. To me it is the only manner in which media utilization promoted by administrators, librarians, and teachers will become meaningful in the future. Otherwise, the learning resources center will be like the library of old, standing out in some peripheral area, not really vital to anyone or anything. We are tremendously concerned about curriculum in the community college because in essence it is our reason for being. We equate the development of curriculum in the community college with time. This calls to mind a favorite story of mine and since my title is Associate Dean of Faculty for Instructional Services, I will tell this joke about myself. If there are any other Deans in the audience, please forgive me.

(JOKE ABOUT HOW TO CLEAN A DEAN)

That story is attributable to my own President, Rodney Berg, so if you ever see Rod or meet him, you can tell him whether you appreciated it or not. But I would give you this definition of curriculum. There are four elements. Number one, development. Number two, adoption. Number three, implementation. Number four, evaluation. We have become past masters at curriculum development in the community college. Each of us has our own Curriculum Councils composed of faculty and administrative staff who grind out curricula for our transfer programs. And one school not looking terribly much unlike the other. We have a little more difficulty with the vocational and technical programs but we seem to do that also without a great deal of difficulty. So development is no problem. We grind it out and a college is born. I think that we have successfully come to grips with adoption of curricula by one manner or another, and as I mentioned, most of us have curriculum committees, or councils which adopt curriculum and deliberate its addition to the college program. But we have not been so successful in points three and four. The implementation and evaluation process in curriculum development has been practically nonexistent in the community colleges. We have literally turned our backs upon it. Once the course has been adopted, administratively we could care less about how it's taught, what methods are used, what techniques, what materials are used, and overriding all of this, the evaluation. I could propose to you that curriculum change is the most important thing needed in

the community college today. And that curriculum change related to media and to utilization of media is of the utmost importance if we are to be successful in the future.

(USE TRANSPARENCY ON CURRICULUM CHANGES)

So, in regard to curriculum change, what I am saying is if we have 7,000 students at the College of DuPage, we have 7,000 doors and 7,000 programs to concern ourselves with. If we are going to really function as an "open door" college and not revert back, as perhaps many colleges and universities have done, to a "revolving door" college, it presents us with tremendous problems. One of these is how do we meet the needs of all of these students? And if the community college today is not a student centered institution, then we're in trouble. I would propose to you in order to accomplish points three and four in the development of curriculum, that is implementation and evaluation, that we need a platform for becoming student centered, and I would offer these points to you as the community college platform of the future. Number one, that the student is central focus for the learning process. Number two, teaching occurs only when students learn. Number three, effective educational experiences, regardless of their format, will modify behavior in a positive manner. Number four, all human beings are motivated to achieve that which they believe is good. Number five, education must be exciting, creative and rewarding for the student and for the teacher. Number six, all human beings have worth, dignity and potential. And number seven, experimentation and innovation are reflections of attitudes. When they are translated into practice, the process of education can be significantly advanced.

We have to be aware of the fact that the individual student comes first. After all, that's why all of us are here. If we are committed to that purpose, then every individual should have the opportunity to progress as far as his interest and ability will permit him to go. We must, if we are to be successful, attempt to meet individual needs. And how can we do this? How can we become student centered in approach? I would propose to you a multi-tracked model of twelve strategies.

(USE TRANSPARENCY ON TWELVE STRATEGIES FOR LEARNING)

Well, I've rambled on for quite some time. I have a feeling at this point that I have perhaps dealt with some measure of success regarding concept and philosophy. But what are you going to do when you get home? What can I give you in the way of practical advice that you will be able to use right away?

I have no formula. And I'm rather glad I don't. For if I did I would be trying to tell you what to do and how to do it. In essence, you are going to have to invent yourselves just as students invent themselves. And what we do at College at DuPage may not and should not look like MSJC, or Austin State, or Itasca State.

But I would like to mention several points that you may wish to consider. These points I have remained cognizant of at DuPage. They are as follows:

1. Development of a program with stated goals and abjectives.
2. Study organizational pattern to determine best way to achieve goals and objectives.
3. Provide your own "Change Agents."
 - a. Faculty committees
 - b. Release time or overloads for program development.
 - c. Instructional Development Officer
4. Provide the necessary resources, equipment and personnel.
5. Develop a plan to make faculty, students and staff alike realize that there are alternative in education.
6. Dream a little. (not innovation)
7. Make learning resources accessible.
8. Publish or Perish.
 - Handbooks
 - Guides
 - Lists
9. In-service training on how to operate and how to use equipment and material.
10. Hire exciting people if you want exciting results.

VI. GUIDELINES ON MEDIA SELECTION

Have you ever ordered a "film" from a catalog and had it arrive only to find that it was really a film-strip, and you had only a motion picture projector? Or, how about the large company that introduced a new product line by sending sets of beautifully done color slides to all of its salesmen only to find that they didn't use them because the slides weren't considered a "first-class, top-drawer" method. The salesmen wanted a complete, professional movie instead.

Why do we so frequently misapply the media? -- There are many reasons. Many of us use money available for production as our sole guide -- if we have little we say, "let's make some slides" -- if we have a lot we say, "let's make a film." But, maybe this basis for discussion isn't effective in terms of the audience. Many times we thrill to moving images when stills tell the story equally well -- Then often, we misapply the media simply because we do not understand the potential of each media type.

Well -- how do we come to understand the potential of each of the media? Experience is a great help -- but if we're new to the game we need guidelines.

To help you select the proper media to use with any given project, let me present a series of guidelines. If you take an honest critical look at your project, and what you hope to accomplish through it in the light of these criteria, you will be well on the way to an effective presentation.

1. Goals

If you are careful and thorough in an attempt to define your objectives for a given project you may quickly eliminate certain media. For example, if one of your goals is to make the student aware of the way that muscles move when your fingers flex -- then an audio tape simply won't do the job.

2. Audience Size

A small audience needing to see the true color of objects may see them very well in an 8mm film. However, with a very large audience color from an 8mm film might be untrue when projected on a large screen. In this case, original slides might be better since it is easier to maintain color balance with slides than with film. Similarly, if the audience is a single individual, a text is better than a 16mm film since he may not have the necessary projection equipment.

3. Audience Location

Is the audience localized in a few centers geographically, or is it spread over many? How easy is it to bring people together, or do you have to go to them? Answers to questions of audience location influence media selection. If the audience can be localized then maybe an extensive multi-media presentation can be used. If they are spaciouly separated, then you may need large numbers of more simplified productions -- film strips, for example.

4. Audience Knowledge

Don't overlook the level of prior knowledge that your audience may have. Nurses may understand how a syringe works but need to see it in operation -- thus, a moving picture seems called for. On the other hand, a bookkeeper trying to learn the double-entry system isn't very concerned in seeing a pretty hand writing on the page -- a simple, still-frame demonstration is enough.

5. Audience Sophistication

While related to Audience Knowledge -- Audience Sophistication is still a different judgement criteria. College graduates, for example may demand a more professional media choice than high school drop-outs. The tricks of showmanship work better with more sophisticated audiences.

6. Audience Time

How much time does the student have to devote to your message? If time is severely limited, you must compress the message in such a way that it is easily grasped in a minimum number of minutes -- perhaps a film is best.

7. Presenter's Sophistication and Experience

You need to analyze the level of sophistication either felt or realized by you, your boss, and by the person or persons who may present the material. In the organization that does everything "first-class" a film strip might be considered less than adequate and maybe television should be used -- it has glamor. If an instructor has always worked with over-head transparencies and phonograph records, he may resist, resent or omit altogether the use of your newly prepared set of slides with synchronized audio tape.

8. Production Budget

Money is always important. Most often there is too little, but when there is enough for that great epic film -- don't make it if slides will do a better job in relation to other criteria. Budget should have nothing to do with media selection. In the ideal situation it would not. In any case, your creativity and original thoughts should take precedence over dollars available.

9. Potential Amortization

Here's a consideration often overlooked in the selection of media. Usually when setting our goals and objectives we make little provision for the generation of raw material which can be used for other purposes than strictly within the context of the immediate project. For example, if you make a video tape, that's all you have at completion -- a video tape. However, if you make a slide film you've generated pictures for simple slides, for television, for film making -- even for literature and promotional uses. Try to remember that with careful planning, a project can generate source materials for other potential uses than the original concept.

10. Post-Production Costs

Although this is not always a critical consideration, some thought should be given to costs incurred at the receiving point. Try to answer some of these questions.

a. Does the user have to buy or rent equipment to be able to use the program?

By equipment I mean TV equipment or a motion picture projector or other like items.

- b. How often would he need to do this?
- c. What manpower costs develop as a result of shipping, set-up or tear-down situations, etc?
- d. Does an instructor have to be paid to present the material or are travel and living expense monies necessary? Post-Production Costs will generally be greater as the degree of sophistication of the product increases. And, while there may be none, you should always consider the possibility.

11. Flexibility

Here, we're concerned with the flexibility or adaptability of the chosen media. Can the end product be easily modified to adapt it to changed audiences or needs? With a film, change is difficult. With overhead transparencies, you can omit certain cells to produce specially tailored effects.

12. Who Presents the Material

You have to consider the degree of experience and sophistication of the instructor. If he is a brilliant teacher who knows the subject and audience you may be able to structure the media selection so that he can involve himself in the learning process to a maximum degree. If, however, you're not sure of his capabilities or wish to force your control on the learning experience, you will need to more completely package the project to control the outcome.

13. Set-Up Time

How long does it take to get the program ready for showing at the receiving point? If scheduling, travel or other considerations do not allow lengthy set-up time, you must select a medium that is virtually "ready to go." Generally, the various media can be placed in the following order in terms of set-up time required -- in order of most lengthy to least lengthy: (1) mixed or multi-media; (2) multi-screen film; (3) television; (4) slides; (5) slidefilm; (6) motion pictures; (7) tapes and records; and (8) texts.

14. Post-Production Logistics and Staffing

This is somewhat tied to Post-Production Cost and several of the other guidelines previously mentioned. Here, however, we need to consider any problems of a

logistical nature that might hamper our production. Consider such things as ease of shipment, reliability of shipping method, possible breakage and the simple bulk or size of the product. Also, determine if the media chosen requires elaborate staffing from the standpoint of technical personnel. Will there be a "people" coordination job to do at the receiving point?

15. Content

If we were stating our guidelines in order of importance, this would probably have been presented earlier. The very nature of the content of your project -- the nature of the information you desire to transmit, will perhaps determine your media choice. I say "perhaps" -- be sure you don't jump to a conclusion. I raise the question of program content only to be certain that a fairly exhaustive study of what it is to be is made and then used as a basis for media selection.

16. Story Line

Related to project content you must give some consideration to the type of "story line" necessary to get the message across, then some type of media that conveys motion may be mandatory. Still, you may be able to convey motion in sound only without visuals. But, in any case, if you need to see an event happen you probably couldn't use still slides or an overhead transparency. Under story line, then, consider the necessity for motion and for visual or sound forms of action. Remember that animation can be used in place of real motion, but that it is usually quite expensive.

Remember, too, that if only one or a very few instances of motion are involved, you do not necessarily need motion throughout the production. Perhaps most of the production can be done with still pictures or texts using a few short elements of movement. While this sounds easy, remember that we are now discussing a multi-media approach (more than one medium), which may be much more complicated and costly to produce and use.

17. Color

A very basic consideration, if you decide that a visual medium is necessary, is to

then decide if color is necessary and, if so, what quality color? Remember, slides give very faithful color. It is often questionable whether or not film or television will give the same.

18. Continuing Education Aspect

A final guideline to consider relates again to your goals and objectives. Do you plan this specific production to stand alone as a "one-shot deal," or is it to be used in context with other educational programming or as a part of a series of production?

Answers to these questions may influence your media selection to some extent. For example, a continuing program ought to gear individual elements so that each relates to each. Here, a simple film might not be enough. You may need to supply written study aids for individual use or you may need to provide testing capability which might mean the selection of a medium having computer capabilities.

These eighteen guidelines do not pretend to exhaust the subject of media selection in any sense. You can probably think of several others. The point to remember, however, is that a thorough and careful study should be made before committing one's self to a specific format. Solutions are not always best when seen in first light. Failure to do an adequate job of thinking through your program may well result in costly mistakes -- or worst of all -- failure of the student to receive the message.

It's up to you.